Navigation Sensor System Interface/Command, Display and Control Software (NAVSSI/COMDAC) Training







Navigation/Shiphandling
Training Offsite
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UNCLASSIFIED



Purpose

 To provide updated information on current and planned NAVSSI/COMDAC training.



Responsibilities

CNO N633

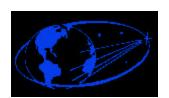
 Provide resources to equip schoolhouses and develop course material.

SPAWAR PMW 156

- Procure/install required hardware for schoolhouses.
- Develop and implement the required courses of instruction.

CNET

- Approve SPAWAR developed course of instruction.
- Eventually assume overall responsibility for NAVSSI training.
 - Operator Administrative ~ Next year
 - Operator Hardware ~ 3 years
 - Maintainer Administrative On task
 - Maintainer Hardware ~ 2 years



Current NAVSSI Training

NAVSSI Block 3 Build 4

- Install training provided by SSC San Diego personnel onboard the host ship.
 - > Both officers and enlisted operators/maintainers receive the training.
 - > Requires about one week to run all required personnel through course.
 - > SPAWAR is available for any required refresher training.

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Planned NAVSSI Training

- Three major training areas:
 - 1. Officer
 - 2. Enlisted Operator
 - 1. QM/OS
 - 3. Enlisted Maintainer
 - 1. ET



Planned Officer Training

- Training to be conducted at SWOS Newport, RI
- Initial SWOS instructors to be trained at US Coast Guard C2CEN Portsmouth, VA.
 - Ten day course
 - Initial quota of 3 instructors
 - Scheduled for October 01
- SPAWAR procure and integrate hardware Fall 01
 - Initial outfitting for 12 seats
- SPAWAR scheduled to install hardware at SWOS Winter 01
 - Still need to resolve building site with SWOS



Planned Officer Training Cont.

- Course of instruction under development
 - Basically same course given to Enlisted Operators
- SPAWAR will provide one course of instruction
 - SWOS can tailor course to meet different training level requirements
 - > Division Officer/Department Head/PCO/Major Command
 - Refresher training to be provided by CBT (under development)
 - > USNA/ROTC/OCS will also receive CBT



Planned Enlisted Operator Training

- Initial training sites will be at FTC San Diego, CA and FTC Norfolk, VA.
 - FTC San Diego will be Course Coordinator Model Manager (CCMM)
 - Evaluating feasibility of establishing future training sites at other Fleet concentration areas
 - > e.g. Yokosuka, JA; Corpus Christi, TX; Everett, WA
- Initial FTC/ATG instructors to be trained at US Coast Guard C2CEN Portsmouth, VA.

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- Ten day course
- Initial quota of 21 instructors
- Scheduled for September and October 01



Planned Enlisted Operator Training Site Schedules

FTC San Diego, CA:

- SPAWAR procure and integrate hardware Summer 01
- SPAWAR scheduled to install hardware Fall 01
- Lead training site; draft run scheduled for December 01
- First class scheduled for January 02

FTC Norfolk, VA:

- SPAWAR procure and integrate hardware Fall 01
- SPAWAR scheduled to install hardware Winter 01
- First class scheduled for January 02



Planned Enlisted Operator Training Course of Instruction

- Contact award expected by the end June for course development.
- Two week course of instruction
 - 12 students per class
 - 10 classes per year at each FTC (240 students per year)
 - Targeted for QM, OS, and Navigator.
 - QM's and OS's will receive QM-0230 NEC (ECDIS-N Navigation Operator) upon successful completion of the course.
 - > NEC limited to E4-E9
 - Training consists of NAVSSI operation and ECDIS-N procedures

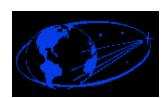


Planned Enlisted Operator Training Course Description Highlights

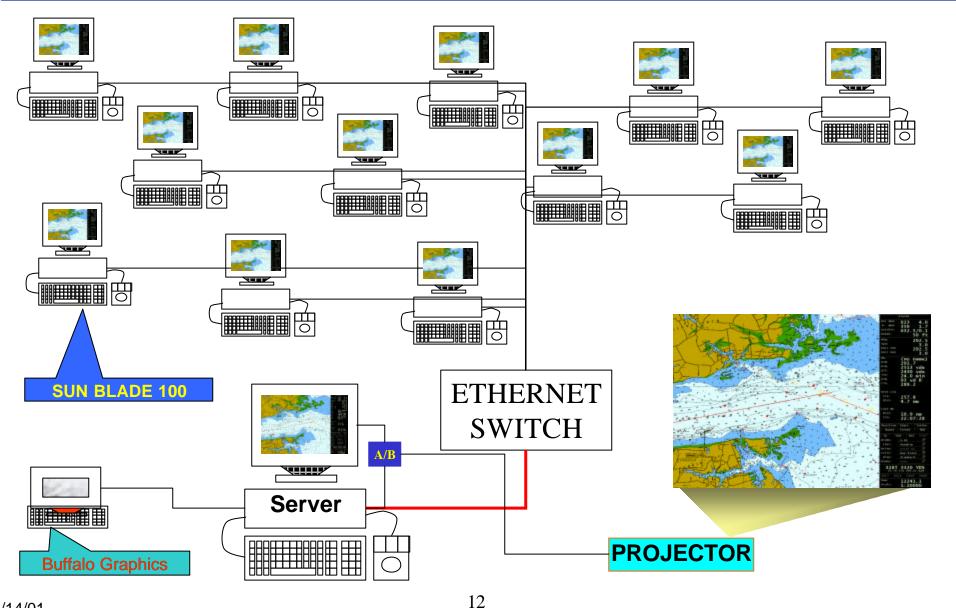
Students will be instructed in the following areas and procedures:

- Voyage Planning & Monitoring
 - Great Circle to Rhumb Line Track Voyage Planning.
 - Full Waypoint Capability
 - PIM and ETA Calculations/labeling
 - Dynamic Calculations for ETA
 - Precision Anchoring
- Charts and Displays
 - NIMA DNC and NOAA-approved RNC Charts
 - WGS-84 Datum/Datum Conversion
- Automatic Radar Plotting Aid (ARPA)
 - Target Tracking
 - Collision Avoidance
 - Predicted Areas of Danger
 - Predicted Point of Collisions

- Position Sources
 - GPS
 - Inertial Navigation Systems
 - Integrated GPS/INS
 - Astronomical (STELLA)
 - Visual/Radar/Combination
 - Radar Chart Matching Overlay
 - Manual
 - Running fix
- Man overboard function (SAR Based)
- Tides, Currents & Almanac Data/Display



Planned Enlisted Operator Training Nominal FTC Classroom





Planned Enlisted Operator Training Miscellaneous Items

- Shipboard NEC manning to be determined.
 - Estimating 5-8 NEC holder billets per ship
 - Includes Navigator, Leading QM, QM/OS watchstanders
- Anticipate CADRT and ND³ training to use NAVSSI course of instruction.
 - Signed MOU between USCG C2CEN, PMW 156, PMS 400 and PMS 440/411 for COMDAC development
- Priority seating for LINCOLN/WASHINGTON BGs IOT to meet upcoming deployments.
 - Minesweepers will also be accommodated.



Planned Enlisted Maintainer Training

- Training site currently at FCTC Dam Neck, VA.
 - Two hardware suites already installed
- Expect pilot course to start at FTC San Diego, CA in July.
 - One hardware suite already installed, another in progress
- New course, Information Systems Maintenance (ISM) is a result of the merger of two existing courses:
 - Combines SNAP III/Command Center Maintenance (CCM), and TAC-N Maintenance courses
 - 12 week course length
 - Four classes per year at each site
 - Approximately 25 students per class (200 students per year)



Planned Enlisted Maintainer Training Course Description Highlights

- Course of instruction will include:
 - TAC-3/TAC-4 preventative and corrective maintenance
 - LAN/WAN theory and protocols
 - HP-UX and WinNT System Administration
 - NAVSSI
 - Systems-Level troubleshooting
- Upon successful course completion, graduates receive an ET-1678 NEC
- NAVSSI Maintainer manning will be dependent upon ship type

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Conclusions

- NAVSSI training is moving forward
 - Aggressive development and implementation schedule
 - N6/SPAWAR have already committed \$2M
 - N6 Number 3 priority for PR03
 - Approved training plus-up of \$1.9M
- Operator and Maintainer pieces are falling in place.



Questions?

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BACK-UP

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Instructor Training Quotas

Δ TOIIO	ASSIGNMENT	PLAN
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Session 1

	<u>Date</u>	Quotas	<u>Activity</u>
•	24 Sept-5 Oct	2	FTC Norfolk
•	24 Sept-5 Oct	2	FTC San Diego
•	24 Sept-5 Oct	3	ATG San Diego
•	24 Sept-5 Oct	3	ATG Bremerton
•	24 Sept-5 Oct	2	ATG Norfolk

QUOTA ASSIGNMENT PLAN

Session 2

	<u>Date</u>	Quotas	Activity
•	15 Oct- 26 Oct	2	MWTC Ingleside
•	15 Oct-26 Oct	3	SWOS
•	15 Oct-26 Oct	2	ATG Norfolk
•	15 Oct-26 Oct	2	ATG Mayport
•	15 Oct-26 Oct	2	FTC Norfolk
•	15 Oct-26 Oct	1	FTC Mayport

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NAVSSI "Full" Installations FY 01

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HULL NO/NAME	BG/ARG	LOCATION
CVN 73 GEORGE WASHINGTON	GW	Norfolk, VA
CVN 75 HARRY S. TRUMAN	TRUMAN	Norfolk, VA
CVN 76 RONALD REAGAN	REAGAN	TBD
DDG 54 CURTIS WILBUR	K HAWK	Yokosuka, JA
DDG 56 McCAIN	K HAWK	Yokosuka, JA
DDG 57 MITSCHER	ROOSEVELT	Norfolk, VA
DDG 60 P. HAMILTON++	MEF 04-2	Pearl Harbor, HI
DDG 62 FITZGERALD++	MEF 02-2	San Diego, CA
DDG 67 COLE	ENT	Norfolk, VA
DDG 69 MILIUS	MEF	San Diego, CA
DDG 75 DONALD G. COOK	TRUMAN	Norfolk, VA
DG 93 CHUNG-HOON	TBD	TBD
DDG 94 NITZE	TBD	TBD
LCC 20 MOUNT WHITNEY	2nd Flt Flagshi	p Norfolk, VA
LHD 4 BOXER	BOXER	San Diego, CA
FTSC LANT	N/A	Dam Neck, VA
AESD	N/A	San Diego, CA



NAVSSI "Full" Installations FY 02

HULL NO/NAME	BG/ARG	LOCATION
AGF 03 LASALLE	6th Flt Flagship	Gaeta, IT
AGF 11 CORONADO	3rd Flt Flagship	San Diego,CA
CV 63 KITTY HAWK++	K HAWK	Yokosuka , JA
CVN 65 ENTERPRISE	ENTERPRISE	Norfolk, VA
CVN 69 EISENHOWER	IKE	Norfolk, VA
CVN 71 ROOSEVELT++	ROOSEVELT	Norfolk, VA
DDG 51 ARLEIGH BURKE@	ROOSEVELT	Norfolk, VA
DDG 53 JOHN PAUL JONES	CONNIE	San Diego, CA
DDG 59 RUSSELL	STENNIS	Pearl Harbor,HI
DDG 61 RAMAGE	GW	Norfolk, VA
DDG 64 CARNEY++	JFK	Mayport, FL
DDG 66 GONZALES++	ENTERPRISE	Norfolk, VA
DDG 65 BENFOLD	CONNIE	San Diego, CA
DDG 73 STEPHEN DECATUR	MEF 00-2	San Diego, CA
DDG 74 DONALD L. McFAUL	ENTERPRISE	Norfolk, VA
DDG 95	TBD	TBD
DDG 96	TBD	TBD
LPD 19 MESA VERDE	TBD	TBD
++ Blk3 Bld 2 to Blk 3 Bld 4 Upgrade		

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NAVSSI Lite Installs

- First installs on Minesweepers
 - Initial install August 01
 - 3 MHCs and 2 MCMs
- BattleGroup installs in Fall 01
 - LANT Fleet GEORGE WASHINGTON BG
 - PAC Fleet LINCOLN BG
 - Some ships that already have an older NAVSSI (non-ECDIS-N) will receive a NAVSSI Lite
 - Temporary solution to provide BG wide ECDIS-N
 - Older NAVSSI will be upgraded per original plan
 - NAVSSI Lite will be reusable for another platform



Minesweeper Installs

Group	Homeport Decom				Variant	NAVSSI Installed	Comments
MIW RG 2	INGLESIDE	BLACKHAWK	MHC 5	8	Lite		
MIW RG 2	INGLESIDE	HERON	MHC 5	52	Lite		
MIW RG 2	INGLESIDE	PELICAN	MHC 5	3	Lite		
MIW RG 2	INGLESIDE	PIONEER	MCN 9)	Lite		
MIW RG 2	INGLESIDE	CHAMPION	MCN 4	ļ	Lite		

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LINCOLN BG Installs

Group	Homeport	Decom				Variant	NAVSSI Installed	Comments
			FY02-04 TCD 15 DEC 01		ĺ			
			CCDG3/CDR31/CPR5/C\		VW14			
			ABRAHAM LINCO	LN CV	'BG	TCD 15 DEC 01	DEPLOY 14 JU	JN 02
LIN-BW 02	EVERETT		ABRAHAM LINCOLN	CVN	72	Lite	Block 3 Build 2	B3B4 in FY03
LIN-BW 02	SDIEGO		SHILOH	CG	67	Lite	Block 2	
LIN-BW 02	SDIEGO		VALLEY FORGE	CG	50	None	Block 2	Smart Ship
LIN-BW 02	PEARL H.		FLETCHER	DD	992	Lite	Block 2	
LIN-BW 02	PEARL H.		PAUL HAMILTON	DDG	60	None	Block 3 Build 4	
LIN-BW 02	BREMERTO	30-Sep-06		AOE	2			
			BELLEAU WOOD	<u>ARG</u>	MEU 11	TCD 15 DEC 01	DEPLOY 15 JU	JN 02
LIN-BW 02	SDIEGO		BELLEAU WOOD	LHA	3	Lite	Block 2	
LIN-BW 02	SDIEGO	30-Sep-05	DENVER	LPD	9	Lite		
LIN-BW 02	SDIEGO	30-Sep-08	MOUNT VERNON	LSD	39	Lite		
			MEF 02-2			TCD 28 FEB 02	DEPLOY 19 S	EP 02
MEF 02-2	PEARL H.	30-Sep-09	CROMMELIN	FFG	37	Lite		
MEF 02-2	SDIEGO		HIGGINS	DDG	76	Lite	Block 3 Build 2	B3B4 in FY03
MEF 02-2	SDIEGO		MILIUS	DDG	69	None	Block 3 Build 4	
			CDOPS JIATF WE	<u>ST</u>		TCD 17 DEC 01	DEPLOY 15 JU	JN 02
CDOPS	SDIEGO		MOBILE BAY	CG	53		Block 2	
			CDOPS JIATF EAS	<u>ST</u>		TCD 15 FEB 02	DEPLOY 19 A	UG 02
CDOPS	SDIEGO		MCCLUSKY	FFG	41	Lite		
	allations, All	Outside CNO	O Availability Windows	5				
_egend								
	Controversia	l; Full NAVSS	I Installation Planned FY	03				
	Lite Not Req	uired, NAVSS	I Block 3 Build 4 or Sma	art Ship	Already Ins	stalled		
	SECNAV W	aiver Require	d (Within 5 years of Dec	ommisś	į́dning)			



GW BG Installs

Group	Homeport	Decom				Variant	NAVSSI Installed	Comments
			FY02-05 TCD 10 JAN 0	2				
			CCDG2/CDS26/CPR2/C	CVW	17			
			G. WASHINGTON JTG			TCD 10 JAN 02	DEPLOY 20 JUL	. 02
GW-NAS 02	NORFOLK		G. WASHINGTON	CVN	73	None	Block 3 Build 4	
GW-NAS 02	NORFOLK		NORMANDY	CG	60	Lite	Block 2	
GW-NAS 02	NORFOLK		MONTEREY	CG	61	None	Block 2	Smart Ship
GW-NAS 02	NORFOLK		BARRY	DDG		Lite		B3B4 in FY03
GW-NAS 02	NORFOLK		LABOON	DDG	58	Lite		B3B4 in FY03
GW-NAS 02	NORFOLK		MAHAN	DDG	72	None	Block 3 Build 4	
GW-NAS 02	NORFOLK	30-Sep-05	A.W. RADFORD	DD	968	Lite		
GW-NAS 02	NORFOLK		KAUFFMAN	FFG	59	Lite		
GW-NAS 02	EARLE	30-Sep-01	SUPPLY	AOE		None		Xfer to MSC
			NASSAU ARG			TCD 10 JAN 02	DEPLOY 11 JUL	. 02
GW-NAS 02	NORFOLK		NASSAU	LHA	4	Lite	Block 2	Block 4 in FY05
GW-NAS 02	NORFOLK	30-Sep-05	AUSTIN	LPD	4	Lite		
GW-NAS 02	LTL CRK		TORTUGA	LSD		Lite		B3B4 in FY03
			MIW READY GROUP 2			TCD 15 FEB 02	DEPLOY 15 AUG	
MIW RG 2	INGLESIDE		OSPREY	МНС	51	Lite		
MIW RG 2	INGLESIDE		HERON	МНС		None	Lite	Lite in FY01
MIW RG 2	INGLESIDE		PELICAN	МНС		None	Lite	Lite in FY01
MIW RG 2	INGLESIDE		FALCON	МНС	59	Lite		
MIW RG 2	INGLESIDE		PIONEER	MCN	9	None	Lite	Lite in FY01
MIW RG 2	INGLESIDE		CHAMPION	MCN		None	Lite	Lite in FY01
			SNFL 2-02			TCD 1 JAN 02	DEPLOY 1 JUL	02
SNFL 2-02	MAYPORT		DEWERT	FFG	45	Lite		
			UNITAS			TCD 7 JAN 02	DEPLOY 1 JUN	02
UNITAS	LTL CRK		ASHLAND	LSD	48	Lite		
UNITAS	MAYPORT	30-Sep-03	SAMUEL E MORISON	FFG	13	Lite		
UNITAS	NORFOLK		SIMPSON	FFG	56	Lite		
			UNITAS			TCD 1 APR 02	DEPLOY 1 OCT	02
UNITAS	MAYPORT	30-Sep-08	O'BANNON	DD	987	Lite	Block 2	
UNITAS			JOHN L HALL	FFG		Lite		
		•						
16 Lite Install	lations, All 0	Outside CN	O Availability Windows					
Legend			·					
	Full NAVS	SI Installation	n Planned FY03					
			SSI Block 3 Build 4 or Smart S	: :hî 25 A	: Ireadv	Installed		
			ired (Within 5 years of Decomr					